

In August, 1912, Dr. Walter Faxon brought me three specimens of *Radix auricularia* (Linn.), which he had found very near the place where I had collected *P. salsa*, and *O. bisuturalis* and *trifida* in 1893. In October, 1912, Dr. Faxon and I collecting again at this spot, secured several more specimens, varying in age from very young to fully mature. All we found were on *Chara*, and in more or less deep and exposed parts of the river. I examined quantities of *Potamogeton* without securing a specimen, but nearly every clump of *Chara* yielded at least one. In the shallow sheltered coves and ditches we found great quantities of *Galba palustris*, *Planorbis trivolvis*, *Planorbis albus*, *Physa heterostropha* and *Ancyclus parallelus* but these species all avoided the deep water of the river as surely as *R. auricularia* kept away from the shallow places. I have never found *Galba palustris*, *P. trivolvis*, or *R. auricularia* in that part of the river above Watertown which has always been fresh water. The common species there are *Pseudo succinea columella* and *Planorbis bicarinatus*, neither of which have yet been found in the river at Cambridge.

There are numerous explanations for the sudden appearance of exotic species in unexpected localities. A very popular, and probably in many cases a true one, is that they have escaped from some nearby greenhouse. In support of this theory, I will admit that there are several greenhouses in Cambridge, and that from some of them to the river would be but a short walk, but a comparatively long crawl.

SPHÆRIIDÆ OLD AND NEW, III.

BY V. SÆRKL.

P. COLUMBIANUM,¹ n. sp.—Mussel of medium size, strongly inflated, outlines (along the valve edges) oval to elliptic without any angles, beaks somewhat behind the middle, large, prominent, rounded or slightly flattened on top, or even calyculate; surface more or less uneven from lines of growth, somewhat shining, with fine irregular striæ, color light corneous to yellowish, often in alternating zones, shell thin, sub-translucent; hinge rather slight, cardinal teeth small, the right curved with the posterior end thicker, left

¹The name is not strictly in conformity with the rules, but appears preferable to *columbiense*.

anterior with apex pointed, posterior quite short; ligament and resilium rather short and slight.

Long. 4.2, alt. 3.6, diam. 3 mm. (100 : 86 : 71).

Long. 3.3, alt. 2.6, diam. 2.3 mm. (100 : 79 : 70).

Hab.: British Columbia, apparently widely distributed and common, and rather variable with respect to size and shape (no doubt, also in Washington, etc.). Vicinity of Esquimalt, collected by Mr. Taylor over twenty years ago, sent by Justice F. R. Latchford, No. 6362 cotypes with the lot in Mr. Latchford's collection, and lots simply marked "B. C." at least some of them from that vicinity, are in various collections; Chilliwack Creek and Lake, B. C., collected by a member of the Canada Geol. Surv. staff, sent by Mr. Whiteaves; a marsh, Duncans, B. C., received from Mr. A. W. Hanham. The first specimens were received in 1895, and the species has been regarded as distinct ever since.

P. furcatum, n. sp.—Mussel oblique, medium inflated, superior margin little curved, posterior and inferior forming one continuous curve to the rounded-angular anterior end, or the posterior margin slightly subtruncate; supero-anterior slope at an angle with the upper margin, well marked, straight or little curved, at an angle of alt. 45° to the longitudinal axis; beaks slightly behind the middle, rather large, rounded or slightly flattened on top; scutum and scutellum slightly marked, small; surface polished, with slight, shallow striæ; color plumbeous around the beaks, straw along the margins, the two shades not sharply defined, shell subtranslucent in the plumbeous area, rather opaque in the light zones; hinge moderately strong, right cardinal tooth curved with the posterior part bifid, the outer, or posterior, shank separated by a groove even above, straight or curved with the convexity below, left anterior short with apex rounded, posterior oblique, slightly curved, the space between them wide posteriorly; outer laminae of the right valve small; ligament and resilium short, moderately strong.

Long. 4, alt. 3.6, diam. 2.3 mm. (100 : 90 : 57).

Hab.: Green Lake, Seattle, Washington, collected by Mr. P. B. Randolph, with *P. idahoense* Roper and others; types acc. No. 3896 b, part, of the Carnegie Museum, Pittsburgh. Probably none of the specimens are full-grown. The mussel resembles some forms of *P. variabile* Pme., but is more oblique, the color is different, and the cardinal teeth are markedly different; named from the strongly bifid, or bifurcate, right cardinal.

The mussel also somewhat resembles *P. randolphi* Roper, from Seattle, Washington, but is much more oblique, the beaks are larger, and the surface striae are slighter, more shallow, and more distant.

P. (furcatum var.?) *rhombicum*.—Mussel smaller, more oblique, rhombic in outlines; beaks small, color more yellow; the posterior part of the right cardinal tooth is thin and plain and correspondingly the space between the two left ones is quite narrow; ligament short and slight. Long. 3, alt. 2.6, diam. 1.8 mm. (the largest specimen). Also probably none of these are full-grown. Hab.: with the preceding, in the same lot. Apparently of the same group with *P. furcatum*, to judge from the shape; more material will prove whether the two are distinct or forms of one species.

F. W. BRYANT.

Mr. F. W. Bryant, of San Diego, Cal., while visiting Hawaii, died of heart failure on October 23, 1912. Born in Ohio about 70 years ago, he was an old friend of the late Prof. A. G. Wetherby, with whom he often collected. He described several species of Californian land shells in *THE NAUTILUS* (vol. XIII, pages 122 and 143, 1900 and Vol. XVI, page 70, 1902). *Pyramidula bryanti* Harper, was named in his honor.

NOTES.

LAMARCK'S COLLECTION OF SHELLS.—We take the liberty of quoting from a letter to one of the editors written by Mr. Charles Hedley from Geneva, Oct. 18, '12. "I have just been through Lamarck's types and have been rewarded for my trouble by recovering two or three lost species. The Lamarckian collection was as you know bequeathed by Delessert to the Geneva Museum. It is in excellent preservation, kept locked up apart from the general collection in four cabinets. The shells are gummed on the usual tablets and in the case of the bivalves the original label in Lamarck's writing is pasted to the under surface of the tablets. Each tablet has a colored margin to indicate geographical division; thus Australasia dark blue, Indian ocean yellow. "There is also a copy of the